

BASE	Shoreline	Bow Lake	Factoria	Northeast	South County
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2016 phase 1 (garbage) 2017 phase 2 (recycle & HHW)	2020	2019
Corresponding closing facility	none	none	close Renton 2018	close Houghton 2021	close Algona 2020
Garbage service	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours
Recycling service	recycling scenario 3	recycling scenario 3	recycling scenario 3	recycling scenario 3	recycling scenario 3
HHW service	none	none	6 days a week	none	none
Space for future services	none	space available for future HHW or alternative processing	none as currently planned, could retain Eastgate property for future services	plan for future alternative processing	plan for future HHW or alternative processing
Green building	LEED Platinum	LEED Gold	LEED Gold	LEED Gold	LEED Gold
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	weekdays 24 hours weekends 8:30 to 5:30	weekdays ~ 7 to 4:30 weekends 8:30 to 5:30	weekdays ~ 8 to 5:30 weekends 8:30 to 5:30	weekdays ~ 7 to 4:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	3 days garbage	3 days garbage
Tipping floor sq. ft.	61,000	64,000	53,000	53,000	53,000
Fully enclosed tipping building	yes	yes	yes	yes	yes
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 self-haul – 17	commercial – 3 self-haul – 10 weekday; 14 weekend	commercial – 3 self-haul – 10 weekday; 14 weekend	commercial – 3 self-haul – 11 weekday; 17 weekend
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	1 pre-load compactor space for 2 <sup>nd</sup>	1 pre-load compactor space for 2 <sup>nd</sup>	1 pre-load compactor space for 2 <sup>nd</sup>
Payload assumption	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons

BASE	Shoreline	Bow Lake	Factoria	Northeast	South County
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes	yes	yes
Capital cost	\$39 million	\$88.5 million	\$22 million (sunk) \$58 million (forecast, 2013\$)	\$90 million (forecast, 2013\$)	\$6 million (sunk) \$74 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: A	commercial: A self-haul: B	commercial: A self-haul: C	commercial: A self-haul: B	commercial: A self-haul: B
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: A	commercial: A self-haul: B	commercial: A self-haul: A	commercial: A self-haul: C	commercial: A self-haul: C
<a href="#">Tonnage capacity LOS 2027</a>	A	A	A	A	A
<a href="#">Tonnage capacity LOS 2040</a>	A	A	A	A	A

Alternative A	Shoreline	Bow Lake	Factoria (commercial building & self-haul building)	South County
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2020 self-haul bldg. 2021 commercial bldg.	2019
Corresponding closing facility	none	close Renton 2018	close Houghton 2021	close Algona 2020
Garbage service	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours
Recycling service	recycling scenario 3	recycling scenario 3	recycling scenario 3	recycling scenario 3
HHW service	none	none	6 days a week	none
Space for future services	none	space available for future HHW or alternative processing	plan for future alternative processing	plan for future HHW or alternative processing
Green building	LEED Platinum	LEED Gold	LEED Gold	LEED Gold
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	weekdays 24 hours weekends 8:30 to 5:30	commercial: weekdays ~ 6:30 a.m. to 11 p.m. closed weekends  self-haul: weekdays ~ 8 to 5:30 weekends 8:30 to 5:30	weekdays ~ 7 to 4:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	3 days garbage
Tipping floor sq. ft.	61,000	64,000	commercial – 33,000 self-haul – 24,000	53,000
Fully enclosed tipping building	yes	yes	yes	yes
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	commercial: scalehouse – 1 scales – 1 in, 1 out  self-haul: scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 self-haul – 17	commercial – 4 self-haul – 24 weekday; 24 weekend	commercial – 3 self-haul – 11 weekday; 17 weekend

Alternative A	Shoreline	Bow Lake	Factoria (commercial building & self-haul building)	South County
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors in commercial building; 2 <sup>nd</sup> can process fewer tph No compactor in self-haul building, but space available	1 pre-load compactor space for 2 <sup>nd</sup>
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	commercial garbage 25 tons self-haul garbage 18 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	commercial: 1 available for garbage or yard waste as needed self-haul: 4 for garbage & yard waste/clean wood	1 for yard waste/clean wood and available for garbage as needed
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	commercial – unloaded on floor, pushed into compactor, compacted into fully enclosed containers self-haul – unloaded on floor, pushed into top loaded walking floor trailers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	unloaded on floor, top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes (commercial building)	yes
Capital cost	\$39 million	\$88.5 million	\$112 million (forecast, 2013\$)	\$6 million (sunk) \$74 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: B	commercial: A self-haul: B	commercial: B self-haul: C	commercial: A self-haul: B
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: B	commercial: A self-haul: B	commercial: B self-haul: B	commercial: A self-haul: C
<a href="#">Tonnage capacity LOS 2027</a>	A	A	commercial: B self-haul: A	A
<a href="#">Tonnage capacity LOS 2040</a>	A	A	commercial: A self-haul: A	A

Alternative A*	Shoreline	Bow Lake	Factoria	Houghton (self-haul only)	South County
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2016 phase 1 (garbage) 2017 phase 2 (recycle, HHW)	Renovated station transitions to self-haul only 2017	2019
Corresponding closing facility	none	none	close Renton 2018	none	close Algona 2020
Garbage service	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial only weekdays self-haul weekends	self-haul only	commercial & self-haul all operating hours
Recycling service	recycling scenario 3	recycling scenario 3	recycling scenario 3 limited hours	yard waste in one chute limited other, e.g., curbside mix OR scrap metal & appliances	recycling scenario 3
HHW service	none	none	6 days a week	none	none
Space for future services	none	space available for future HHW or alternative processing	none as currently planned, could retain Eastgate property for future services	none	plan for future HHW or alternative processing
Green building	LEED Platinum	LEED Gold	LEED Gold	scorecard	LEED Gold
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	weekdays 24 hours weekends 8:30 to 5:30	commercial only weekdays ~ 6:30 a.m. to 11 p.m. self-haul weekends 8:30 to 5:30	weekdays ~ 8 to 5:30 weekends 8:30 to 5:30	weekdays ~ 7 to 4:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	none	3 days garbage
Tipping floor sq. ft.	61,000	64,000	53,000	12,000	53,000
Fully enclosed tipping building	yes	yes	yes	no	yes
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 self-haul – 17	commercial – 6 weekdays self-haul – 14 weekend	self-haul – 16 total, 8 for garbage and 8 for yard waste	commercial – 3 self-haul – 11 weekday; 17 weekend
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors; 2 <sup>nd</sup> can process fewer tph	none	1 pre-load compactor space for 2 <sup>nd</sup>

Alternative A*	Shoreline	Bow Lake	Factoria	Houghton (self-haul only)	South County
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 17 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	2 total – 1 for garbage and 1 for yard waste/clean wood	1 for yard waste/clean wood and available for garbage as needed
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	top loaded into walking floor trailers (direct dump)	unloaded on floor, pushed into compactor, compacted into fully enclosed containers
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes	no	yes
Capital cost	\$39 million	\$88.5 million	\$22 million (sunk) \$60 million (forecast, 2013\$)	\$1.7 million (forecast, 2013\$)	\$6 million (sunk) \$74 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: B	commercial: A self-haul: B	commercial: A self-haul: E	commercial: NA self-haul: F	commercial: A self-haul: B
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: B	commercial: A self-haul: B	commercial: A self-haul: E	commercial: NA self-haul: F	commercial: A self-haul: C
<a href="#">Tonnage capacity LOS 2027</a>	A	A	B	A	A
<a href="#">Tonnage capacity LOS 2040</a>	A	A	A	A	A

Alternative B	Shoreline	Bow Lake	Northeast	South County
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2020	2019
Corresponding closing facility	none	close Renton 2018	close Factoria & Houghton 2021	close Algona 2020
Garbage service	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours	commercial & self-haul all operating hours
Recycling service	recycling scenario 3	recycling scenario 3	recycling scenario 3	recycling scenario 3
HHW service	none	none	6 days per week	none
Space for future services	none	space available for future HHW or alternative processing	plan for future alternative processing	plan for future HHW or alternative processing
Green building	LEED Platinum	LEED Gold	LEED Gold	LEED Gold
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	weekdays 24 hours weekends 8:30 to 5:30	weekdays ~ 6:30 a.m. to 11 p.m. weekends 8:30 to 5:30	weekdays ~ 7 to 4:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	3 days garbage
Tipping floor sq. ft.	61,000	64,000	87,000	53,000
Fully enclosed tipping building	yes	yes	yes	yes
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 self-haul – 17	commercial – 4 self-haul – 21 weekday; 21 weekend	commercial – 3 self-haul – 11 weekday; 17 weekend
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors	1 pre-load compactor space for 2 <sup>nd</sup>
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons

Alternative B	Shoreline	Bow Lake	Northeast	South County
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes	yes
Capital cost	\$39 million	\$88.5 million	\$106 million (forecast, 2013\$)	\$6 million (sunk) \$74 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: A	commercial: A self-haul: B	commercial: A self-haul: C	commercial: A self-haul: B
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: A	commercial: B self-haul: C	commercial: A self-haul: B	commercial: A self-haul: C
<a href="#">Tonnage capacity LOS 2027</a>	A	A	C	A
<a href="#">Tonnage capacity LOS 2040</a>	A	A	B	A



Alternative C	Shoreline	Bow Lake	Northeast
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2020
Corresponding closing facility	none	close Algona 2018 close Renton 2018	close Factoria & Houghton 2021
Garbage service	commercial & self-haul all operating hours	commercial all operating hours self-haul limited hours	commercial & self-haul all operating hours
Recycling service	recycling scenario 3	recycling scenario 3 limited hours	recycling scenario 3
HHW service	none	none	6 days per week
Space for future services	none	space available for future HHW or alternative processing	plan for future alternative processing
Green building	LEED Platinum	LEED Gold	LEED Gold
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	commercial: weekdays 24 hours weekends 8:30 to 5:30 self-haul: weekdays ~ 4 p.m. to 10 p.m. weekends 8:30 to 5:30	weekdays ~ 6:30 a.m. to 11 p.m. weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage
Tipping floor sq. ft.	61,000	64,000	87,000
Fully enclosed tipping building	yes	yes	yes
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 (6 when self-haul not present) self-haul – 17	commercial – 4 self-haul – 21 weekday; 21 weekend

Alternative C	Shoreline	Bow Lake	Northeast
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons
Chutes	2 used for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	2 for yard waste/clean wood and available for garbage as needed
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes
Capital cost	\$39 million	\$88.5 million	\$106 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: A	commercial: B self-haul: F	commercial: A self-haul: C
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: A	commercial: B self-haul: F	commercial: A self-haul: B
<a href="#">Tonnage capacity LOS 2027</a>	A	B	C
<a href="#">Tonnage capacity LOS 2040</a>	A	B	B

Alternative C**	Shoreline	Bow Lake	Northeast	Algona (self-haul only)
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2020	Renovated station transitions to self-haul only 2018
Corresponding closing facility	none	close Renton 2018	close Factoria & Houghton 2021	none
Garbage service	commercial & self-haul all operating hours	commercial all operating hours self-haul limited hours	commercial & self-haul all operating hours	self-haul only
Recycling service	recycling scenario 3	recycling scenario 3 limited hours	recycling scenario 3	yard waste in one chute, no space for other materials
HHW service	none	none	6 days a week	none
Space for future services	none	space available for future HHW or alternative processing	plan for future alternative processing	none
Green building	LEED Platinum	LEED Gold	LEED Gold	scorecard
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	commercial: weekdays 24 hours weekends 8:30 to 5:30 self-haul: weekdays ~ 4 p.m. to 10 p.m. weekends 8:30 to 5:30	weekdays ~ 6:30 a.m. to 11 p.m. weekends 8:30 to 5:30	weekdays ~ 8 to 5:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	none
Tipping floor sq. ft.	61,000	64,000	87,000	12,000
Fully enclosed tipping building	yes	yes	yes	no
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 scales – 1 in, 2 out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 (6 when self-haul not present) self-haul – 17	commercial – 4 self-haul – 21 weekday; 21 weekend	self-haul – 16 total: 8 for garbage and 8 for yard waste

Alternative C**	Shoreline	Bow Lake	Northeast	Algona (self-haul only)
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors	none
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 17 tons yard waste 16 tons
Chutes	2 used for yard waste/clean wood and available for garbage as needed	1 used for yard waste/clean wood and available for garbage as needed	2 used for yard waste/clean wood and available for garbage as needed	2 total – 1 for garbage and 1 for yard waste/clean wood
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	top loaded into walking floor trailers (direct dump)
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes	no
Capital cost	\$39 million	\$88.5 million	\$106 million (forecast, 2013\$)	\$8.9 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: A	commercial: B self-haul: C	commercial: A self-haul: C	commercial: NA self-haul: E
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: A	commercial: B self-haul: D	commercial: A self-haul: B	commercial: NA self-haul: E
<a href="#">Tonnage capacity LOS 2027</a>	A	B	C	A
<a href="#">Tonnage capacity LOS 2040</a>	A	B	B	A

Alternative D	Shoreline	Bow Lake	Factoria (commercial building & self-haul building)
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2020 self-haul bldg. 2021 commercial bldg.
Corresponding closing facility	none	close Algona & Renton 2018	close Houghton 2021
Garbage service	commercial & self-haul all operating hours	commercial all operating hours self-haul limited hours	commercial & self-haul all operating hours
Recycling service	recycling scenario 3	recycling scenario 3 limited hours	recycling scenario 3
HHW service	none	none	6 days a week
Space for future services	none	space available for future HHW or alternative processing	plan for future alternative processing
Green building	LEED Platinum	LEED Gold	LEED Gold
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	commercial: weekdays 24 hours weekends 8:30 to 5:30  self-haul: weekdays~ 4 p.m. to 10 p.m. weekends 8:30 to 5:30	commercial: weekdays ~ 6:30 a.m. to 11 p.m. closed weekends  self-haul: weekdays ~ 8 to 5:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage
Tipping floor sq. ft.	61,000	64,000	commercial – 33,000 self-haul – 24,000
Fully enclosed tipping building	yes	yes	yes
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	commercial: scalehouse – 1 scales – 1 in, 1 out  self-haul: scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out

Alternative D	Shoreline	Bow Lake	Factoria (commercial building & self-haul building)
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 (6 when self-haul not present) self-haul – 17	commercial – 4 self-haul – 24 weekday; 24 weekend
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors in commercial building; 2 <sup>nd</sup> can process fewer tph No compactor in self-haul building, but space available
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	commercial garbage 25 tons self-haul garbage 18 tons yard waste 16 tons
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	commercial: 1 available for garbage or yard waste as needed self-haul: 4 for garbage & yard waste/clean wood
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	commercial – unloaded on floor, pushed into compactor, compacted into fully enclosed containers self-haul – unloaded on floor, pushed into top loaded walking floor trailers
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	unloaded on floor, top loaded into walking floor trailers
On-site fuel	yes	yes	yes (commercial building)
Capital cost	\$39 million	\$88.5 million	\$112 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: B	commercial: B self-haul: F	commercial: B self-haul: C
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: B	commercial: B self-haul: F	commercial: B self-haul: B
<a href="#">Tonnage capacity LOS 2027</a>	A	B	commercial: B self-haul: A
<a href="#">Tonnage capacity LOS 2040</a>	A	B	commercial: A self-haul: A

Alternative D**	Shoreline	Bow Lake	Factoria (commercial building & self-haul building)	Algona (self-haul only)
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2020 self-haul bldg. 2021 commercial bldg.	renovated station transitions to self-haul only 2018
Corresponding closing facility	none	close Renton 2018	close Houghton 2021	none
Garbage service	commercial & self-haul all operating hours	commercial all operating hours self-haul limited hours	commercial & self-haul all operating hours	self-haul only
Recycling service	recycling scenario 3	recycling scenario 3 limited hours	recycling scenario 3	yard waste in one chute, no space for other materials
HHW service	none	none	6 days a week	none
Space for future services	none	space available for future HHW or alternative processing	plan for future alternative processing	none
Green building	LEED Platinum	LEED Gold	LEED Gold	scorecard
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	commercial: weekdays 24 hours weekends 8:30 to 5:30 self-haul: weekdays~ 4 p.m. to 10 p.m. weekends 8:30 to 5:30	commercial: weekdays ~ 6:30 a.m. to 11 p.m. closed weekends self-haul: weekdays ~ 8 to 5:30 weekends 8:30 to 5:30	weekdays ~ 8 to 5:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	none
Tipping floor sq. ft.	61,200	64,000	commercial – 33,000 self-haul – 23,580	12,300
Fully enclosed tipping building	yes	yes	yes	no
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	commercial: scalehouse – 1 scales – 1 in, 1 out self-haul: scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 scales – 1 in, 2 out
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 (6 when self-haul not present) self-haul – 17	commercial – 4 self-haul – 24 weekday; 24 weekend	self-haul – 16 total: 8 for garbage and 8 for yard waste

Alternative D**	Shoreline	Bow Lake	Factoria (commercial building & self-haul building)	Algona (self-haul only)
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors in commercial building; 2 <sup>nd</sup> can process fewer tph No compactor in self-haul building, but space available	none
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	commercial garbage 25 tons self-haul garbage 18 tons yard waste 16 tons	garbage 17 tons yard waste 16 tons
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	commercial: 1 available for garbage or yard waste as needed self-haul: 3 for garbage & yard waste/clean wood	2 total – 1 for garbage and 1 for yard waste/clean wood
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	commercial – unloaded on floor, pushed into compactor, compacted into fully enclosed containers self-haul – unloaded on floor, pushed into top loaded walking floor trailers	top loaded into walking floor trailers (direct dump)
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	unloaded on floor, top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes (commercial building)	no
Capital cost	\$39 million	\$88.5 million	\$112 million (forecast, 2013\$)	\$8.9 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: B	commercial: B self-haul: C	commercial: B self-haul: C	commercial: NA self-haul: E
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: B	commercial: B self-haul: D	commercial: B self-haul: B	commercial: NA self-haul: E
<a href="#">Tonnage capacity LOS 2027</a>	A	B	commercial: B self-haul: A	A
<a href="#">Tonnage capacity LOS 2040</a>	A	B	commercial: A self-haul: A	A



Alternative D***	Shoreline	Bow Lake	Factoria	Houghton (self-haul only)	Algona (self-haul only)
Facility opening	Feb. 2008	July 2012 phase 1 (garbage) October 2013 phase 2 (recycle)	2016 phase 1 (garbage) 2017 phase 2 (recycle & HHW)	Renovated station transitions to self-haul only 2017	Renovated station transitions to self-haul only 2018
Corresponding closing facility	none	close Renton 2018	none	none	none
Garbage service	commercial & self-haul all operating hours	commercial all operating hours self-haul limited hours	commercial only weekdays self-haul weekends	self-haul only	self-haul only
Recycling service	recycling scenario 3	recycling scenario 3 limited hours	recycling scenario 3 limited hours	yard waste in one chute limited other, e.g., curbside mix OR scrap metal & appliances	yard waste in one chute, no space for other materials
HHW service	none	none	6 days a week	none	none
Space for future services	none	space available for future HHW or alternative processing	none as currently planned, could retain upper property for future services	none	none
Green building	LEED Platinum	LEED Gold	LEED Gold	scorecard	scorecard
Hours of operation	weekdays 7:30 to 5 weekends 8:30 to 5:30	commercial: weekdays 24 hours weekends 8:30 to 5:30 self-haul: weekdays~ 4 p.m. to 10 p.m. weekends 8:30 to 5:30	commercial only weekdays ~ 6:30 a.m. to 11 p.m. self-haul weekends 8:30 to 5:30	weekdays ~ 8 to 5:30 weekends 8:30 to 5:30	weekdays ~ 8 to 5:30 weekends 8:30 to 5:30
Emergency storage	3 days garbage	3 days garbage	3 days garbage	none	none
Tipping floor sq. ft.	61,000	64,000	53,000	12,000	12,000
Fully enclosed tipping building	yes	yes	yes	no	no
Scale complex	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 space for 2 <sup>nd</sup> scales – 2 in, 2 out	scalehouse – 1 scales – 1 in, 1 out space for 2 <sup>nd</sup> in, 2 <sup>nd</sup> out	scalehouse – 1 scales – 1 in, 1 out	scalehouse – 1 scales – 1 in, 2 out

Alternative D***	Shoreline	Bow Lake	Factoria	Houghton (self-haul only)	Algona (self-haul only)
Unloading stalls	commercial – 2 self-haul – 12	commercial – 3 (6 when self-haul not present) self-haul – 17	commercial – 6 weekdays self-haul – 14 weekend	self-haul – 16 total, 8 for garbage and 8 for yard waste	self-haul – 16 total: 8 for garbage and 8 for yard waste
Compaction	1 pre-load compactor space for 2 <sup>nd</sup>	2 pre-load compactors	2 pre-load compactors; 2 <sup>nd</sup> can process fewer tph	none	none
Payloads	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 25 tons yard waste 16 tons	garbage 17 tons yard waste 16 tons	garbage 17 tons yard waste 16 tons
Chutes	2 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	1 for yard waste/clean wood and available for garbage as needed	2 total – 1 for garbage and 1 for yard waste/clean wood	2 total – 1 for garbage and 1 for yard waste/clean wood
Loading garbage	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	unloaded on floor, pushed into compactor, compacted into fully enclosed containers	top loaded into walking floor trailers (direct dump)	top loaded into walking floor trailers (direct dump)
Loading yard waste & clean wood	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers	top loaded into walking floor trailers
On-site fuel	yes	yes	yes	no	no
Capital cost	\$39 million	\$88.5 million	\$22 million (sunk) \$60 million (forecast, 2013\$)	\$1.7 million (forecast, 2013\$)	\$8.9 million (forecast, 2013\$)
<a href="#">Vehicle capacity LOS 2027</a>	commercial: A self-haul: B	commercial: B self-haul: C	commercial: A self-haul: E	commercial: NA self-haul: F	commercial: NA self-haul: E
<a href="#">Vehicle capacity LOS 2040</a>	commercial: A self-haul: B	commercial: B self-haul: D	commercial: A self-haul: E	commercial: NA self-haul: F	commercial: NA self-haul: E
<a href="#">Tonnage capacity LOS 2027</a>	A	B	B	A	A
<a href="#">Tonnage capacity LOS 2040</a>	A	B	A	A	A

## Level-of-Service – Capacity

Capacity is the measure of a station's ability to accommodate the flow of both commercial and self-haul vehicles and tonnage. There is very little existing literature on how to quantify the capacity of a solid waste facility. The standard used in the 2006 Transfer System Plan was developed using transportation industry standards of measurement for capacity of roadways and intersections – called a level of service or LOS measurement. An LOS measurement is a qualitative measure based on quantitative data. For the 2006 Plan consultants were retained to refine methodology and to apply them to the transfer stations; for this analysis the division applied the methodology.

The methodology for rating actual vehicle and tonnage capacity was developed by determining each station's maximum sustainable operating capacity. Optimal operating capacity is defined as the maximum optimal number of vehicles or tonnage that can be processed through the station each hour based on the station design and customer mix.

The standard chosen for vehicle capacity is an LOS score of C (on a scale of A to F), which is defined as a steady flow of vehicles except during occasional peak periods. The LOS measurements are defined as follows:

- LOS A – Can easily accommodate vehicles/tonnage at all times of the day (optimal operating capacity exceeded <0.5% of operating hours).
- LOS B – Able to accommodate vehicles/tonnage at most times of the day (optimal operating capacity exceeded between 0.5% - 5% of operating hours).
- LOS C – Able to accommodate vehicles/tonnage all times of the day, except for occasional peak hour times (optimal operating capacity exceeded 5% - 10% of operating hours).
- LOS D – Beginning to have difficulty accommodating all vehicles/tonnage during peak hours (optimal operating capacity exceeded 10%-20% of operating hours).
- LOS E – Cannot accommodate vehicles/tonnage without off-site impacts or overloading on-site resources (optimal operating capacity exceeded 20 - 50% of operating hours).
- LOS F – Cannot accommodate vehicles/tonnage throughput without off-site impacts and overloading of on-site resources. Capacity exceeded most hours (optimal operating capacity exceeded >50% of operating hours).